

What is claimed is:

1. A zoom lens formed of only two lens groups, in order from the object side, as follows:

a first lens group; and

a second lens group;

wherein

the first lens group includes, in order from the object side: a first lens component of negative refractive power that is made of plastic has at least one aspheric lens surface; and a second lens component of positive refractive power;

the second lens group includes, in order from the object side: a stop; a first lens component consisting of a first lens element having a biconvex shape and made of plastic with at least one lens surface aspheric; and a second lens component that includes, in order from the object side, a lens element having negative refractive power with the absolute value of the curvature of its object-side lens surface being smaller than the absolute value of the curvature of its image-side lens surface, said lens element being joined at said image-side lens surface to a lens element having a biconvex shape; and

the following conditions are satisfied:

$$B^{1/2} < f_{G2} / f_w < 0.9 \cdot B$$

$$-2.0 < f_{G1-1} / f_w < -1.5$$

$$R_{G2-1} / f_w > 0.8$$

$$|f_{G1} / f_w| < 3 \cdot B$$

where

B is the zoom ratio of the zoom lens, namely, the ratio of the focal length at the telephoto end divided by the focal length at the wide-angle end,

$f_{G2}$  is the focal length of the second lens group,

$f_w$  is the focal length of the zoom lens at the wide-angle end,

$f_{G1-1}$  is the focal length of the first lens component of the first lens group,

26  $R_{G2-1}$  is the radius of curvature of the object-side lens surface of the first lens element of  
27 the second lens group, and  
28  $f_{G1}$  is the focal length of the first lens group.

1 2. The zoom lens of claim 1, wherein the first lens group consists of the first lens component of  
2 the first lens group and the second lens component of the first lens group.

1 3. The zoom lens of claim 1, wherein each of the first lens component of the first lens group and  
2 the second lens component of the first lens group consists of a lens element.

1 4. The zoom lens of claim 2, wherein each of the first lens component of the first lens group and  
2 the second lens component of the first lens group consists of a lens element.

1 5. The zoom lens of claim 1, wherein the second lens group consists of three lens elements.

1 6. The zoom lens of claim 5, wherein the first lens group consists of the first lens component of  
2 the first lens group and the second lens component of the first lens group.

1 7. The zoom lens of claim 5, wherein each of the first lens component of the first lens group and  
2 the second lens component of the first lens group consists of a lens element.

1 8. The zoom lens of claim 6, wherein each of the first lens component of the first lens group and  
2 the second lens component of the first lens group consists of a lens element.

1 9. A zoom lens formed of only two lens groups, arranged along an optical axis in order from the  
2 object side as follows:

- 3 a first lens group; and  
4 a second lens group;

wherein

the first lens group includes, arranged along the optical axis in order from the object side, a first lens component made of plastic, having negative refractive power, and having at least one aspheric lens surface, and a second lens component having positive refractive power;

the second lens group includes, in order from the object side: a stop; a first lens component consisting of a first lens element with a biconvex shape that is made of plastic and has at least one aspheric lens surface; and a second lens component that includes, in order from the object side, a lens element of negative refractive power with the absolute value of the curvature of its object-side lens surface being smaller than the absolute value of the curvature of its image-side lens surface, said lens element being joined at said image-side lens surface to a lens element having a biconvex shape;

focusing is performed by movement of the second lens group along the optical axis; and the following conditions are satisfied:

$$B^{1/2} < f_{G2} / f_w < 0.9 \cdot B$$

$$-2.0 < f_{G1-1} / f_w < -1.5$$

$$R_{G2-1} / f_w > 0.8$$

$$| f_w / R_1 | < 0.08$$

$$10 < | f_{G2-2,3} / f_w | < 100$$

where

B is the zoom ratio of the zoom lens, namely, the ratio of the focal length at the telephoto end divided by the focal length at the wide-angle end,

$f_{G2}$  is the focal length of the second lens group,

$f_w$  is the focal length of the zoom lens at the wide-angle end,

$f_{G1-1}$  is the focal length of the first lens component of the first lens group,

$R_{G2-1}$  is the radius of curvature of the object-side lens surface of the first lens element of the second lens group,

$R_1$  is the radius of curvature of the object-side lens surface of the first lens component of the first lens group, and

$f_{G2-2,3}$  is the composite focal length of the joined lens elements of the second lens group.

1        10. The zoom lens of claim 9, wherein the first lens group consists of the first lens component of  
2        the first lens group and the second lens component of the first lens group.

1        11. The zoom lens of claim 9, wherein each of the first lens component of the first lens group  
2        and the second lens component of the first lens group consists of a lens element.

1        12. The zoom lens of claim 10, wherein each of the first lens component of the first lens group  
2        and the second lens component of the first lens group consists of a lens element.

1        13. The zoom lens of claim 9, wherein the second lens group consists of three lens elements.

1        14. The zoom lens of claim 13, wherein the first lens group consists of the first lens component  
2        of the first lens group and the second lens component of the first lens group.

1        15. The zoom lens of claim 13, wherein each of the first lens component of the first lens group  
2        and the second lens component of the first lens group consists of a lens element.

1        16. The zoom lens of claim 14, wherein each of the first lens component of the first lens group  
2        and the second lens component of the first lens group consists of a lens element.

1        17. The zoom lens of claim 1, wherein at least three lens surfaces of the zoom lens are aspheric  
2        lens surfaces.

1        18. The zoom lens of claim 9, wherein at least three lens surfaces of the zoom lens are aspheric  
2        lens surfaces.

1 19. The zoom lens of claim 1, wherein the following condition is satisfied:

2  $|f_w / R_1| < 0.025$

3 where

4  $R_1$  is the radius of curvature of the object-side lens surface of the first lens element of the  
5 first lens component of the first lens group.

1 20. The zoom lens of claim 9, wherein the following condition is satisfied:

2  $|f_w / R_1| < 0.025.$